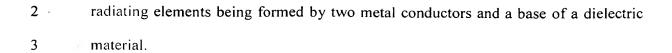
What is claimed is:

An multi-frequency band antenna comprising:

- 2 a first radiating element being shaped as an extended bent wire for functioning as an
- antenna element of a first frequency band, said first radiating element comprising a
- 4 conductive materials
- a second radiating element for functioning as an antenna element of a second frequency
- band, said second frequency band being different from said first frequency band, said
- 7 second radiating element comprising a conductive material; and
- a feed radiating dement having a first end being used as a signal feed point for signals
- 9 of said first and second frequency bands, and a second end being electrically
- connecting said first radiating element to said second radiating element and forming a
- 11 top loaded structure.
- 1 2. The multi-frequency band antenna as claimed in claim 1, said feed radiating element
- 2 being a metal conductor.
- 1 3. The multi-frequency band antenna as claimed in claim 1, said feed radiating element
- being formed by a metal conductor and a base of a dielectric material.
- 1 4. The multi-frequency band antenna as claimed in claim 3, said metal conductor being
- 2 placed on a top surface of said base.
- 1 5. The multi-frequency band antenna as claimed in claim 3, said metal conductor being
- 2 placed on an interior layer of said base.
 - 6. The multi-frequency band antenna as claimed in claim 1, said first and second





- The multi-frequency band antenna as claimed in claim 6, said metal conductors being
 placed on a top surface of said base.
- 8. The multi-frequency band antenna as claimed in claim 6, said metal conductors being
 placed in an interior area of said base.
- The multi-frequency band antenna as claimed in claim 6, said base having at least two
 interior layers and said metal conductors being placed in different interior layers.
- 1 10. The multi-frequency band antenna as claimed in claim 1, said first and said second radiating elements being coplanar and forming an angle with said feed radiating element.
- 1 11. The multi-frequency band antenna as claimed in claim 10, said angle being in a range between 70° to 180°.
- The multi-frequency band antenna as claimed in claim 1, said first and said second radiating elements being placed on a curved surface.
- 1 13. The multi-frequency band antenna as claimed in claim 1, said first radiating element having an extended square-wave pattern.
- 1 4. The multi-frequency band antenna as claimed in claim 1, said first radiating element 2 having an extended saw-tooth pattern.
- 1 15. The multi-frequency band antenna as claimed in claim 1, said first radiating element having an extended sinusoid pattern.



